

"Growth that ignores nature is just unwise. We need to pay more attention to the way we're growing and how we live with water and land."

—Local conservationist in the Chicago area

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Local Solutions for Global Issues

Hard Rain, Hard Choices

Sizing Up the Problem With a Rapid Resource Appraisal

MARIVOR RUNS Th

Imagine waking up in the middle of the night and finding a creek rushing through your bedroom. That's exactly what happened in July of 1996 to hundreds of families in subdivisions along Blackberry Creek southwest of Chicago.

hen families woke up to find floodwater from the creek pouring into their rooms, they knew they had only minutes to evacuate their homes safely. With children clinging to their parents' necks, neighbors young and old linked arms and fought through the fast-moving, chest-high water outside their homes.

As one account puts it, "Curbs and small bushes became submerged traps, causing many to lose their footing and plunge headfirst into the swirling water."

"Our evacuation was very fast and scary," one man recalls. "The thunderstorms and lightning were intense, and there was no time to save family possessions. Our getting out was the most important thing."

Most families made it to high ground,
but many were marooned in
the second stories of their
homes and had to wait to be
rescued. In Cherry Hill, the
hardest-hit subdivision, 103 out of 176
homes suffered damage on the first floor. In some cases, the
water was as deep as 5 feet on the first floor.

When it was all over, first-floor damage alone in five flooded subdivisions totaled almost \$14 million. In Cherry Hill, damage averaged \$68,000 per house.



Learning to Live With Water

The July 1996 storm was not the first time that subdivisions near Black-berry Creek had flooded, but it was the worst. Aurora, the hardest-hit suburb, received 16.91 inches of rain in 24 hours—a state record, just shy of the national record of 19 inches in 24 hours.

"It was an incredible amount of rain," says Rick Hutter, a Cherry Hill resident. "It's just amazing that we didn't have any deaths from drowning or electrocution."

"You can't prepare for every extreme, but we could be a lot smarter about how we deal with where rain goes," a conservationist told the *Chicago Tribune* after the storm. "Growth that ignores nature is just unwise. We need to pay more attention to the way we're growing and how we live with water and land."

Paying attention to water and land is precisely what people in the Blackberry Creek Watershed have been doing since the storm of '96. With help from the Kendall County Soil and Water Conservation District, they formed a planning committee in late 1996. And as if to underscore the need for action, only a couple of months later another storm dumped 4 inches in 24 hours on frozen soils throughout the watershed.

An emergency evacuation plan and sandbagging helped minimize damages this time around. However, the one-two punch of rainstorms sent a wake-up call loud and clear. Something needed to be done.

RRA: An Important Beginning for Locally Led Planning

The magnitude of the flooding problem facing the Blackberry Creek Watershed Planning Committee was staggering. This raised the inevitable question, "Where do you even begin to tackle a problem of such scope?"

A few meetings into the first phase of the planning process, a specialist from the Natural Resources Conservation Service (NRCS) presented one unique approach to beginning work on such a problem. It's called "Rapid Resource Appraisal," or RRA—a system for assessing resource issues in a watershed.

The NRCS specialist explained the RRA's potential to help the committee get a more complete picture of the watershed and conduct a preliminary assessment of the watershed's economic, natural, and social resources. This assessment is conducted through a series of key activities, including educational presentations, a tour of the watershed by the planning committee, meetings in which residents voice their concerns, and meetings in which public officials describe what they are currently doing or will do to tackle the problem.

In the Blackberry Creek Watershed, planning committee members voted for an RRA, formed a subcommittee, and charged it with the task of putting the appraisal into motion. Then they selected a Saturday morning in March of 1997 to conduct it. What follows is a more detailed description of an RRA, and a summary of how the process unfolded in the Blackberry Creek Watershed.

An RRA is only a beginning. But after a crisis, the most difficult step for a community to take is usually the first step.

Signs of a Successful RRA

- An opening of lines of communication among committee members, especially those with conflicting views
- A better understanding of the watershed's resources and problems, as well as the range of solutions
- Movement toward a common view of a "desired future state" for the watershed
- New working relationships between the committee and government officials
- Stakeholder support for the committee and participation on technical subcommittees

The Rapid Resource Appraisal

t usually begins with a crisis.

Locally led conservation planning efforts are often sparked by a serious problem, such as severe flooding, unwanted chemicals in the public water supply, loss of unique habitat, or some other unexpected dilemma.

In facing such issues, a Rapid Resource Appraisal (RRA) brings analysis, speed, focus, and unity to the task at hand. An RRA is one of the most effective ways for a committee to quickly assess the scope of its problems. What's more, the RRA keeps a committee focused on the primary concerns, rather than distracting side issues.

In responding to a crisis, a community typically forms a committee that begins a structured planning process. Two or three meetings into the effort, however, committees often encounter the first of many obstacles that threaten to block the initiative. Committee members almost always find themselves facing similar problems:

- A growing list of perceived problems in their watershed
- Widely differing views on the causes of the problems
- A list of solutions driven by self-interest
- A limited, piecemeal understanding of the human and ecological resources and activities in the watershed
- Lack of a common vision of a "future desired state"

These roadblocks are inevitable as a committee begins to identify problems in the watershed. Committee members must air individual concerns, views, solutions, and differences before they can expect to develop a shared understanding of their watershed's problems and identify a common set of objectives.

Unfortunately, many committees become bogged down during this process. Within the environment of a sterile meeting room, committee members seldom link lengthy discussions and reams of reports with actual issues in their watershed. Discussions about local, regional, state, or federal jurisdictions and associated rules and regulations only worsen the problem.

A Rapid Resource Appraisal (RRA) can keep the committee's efforts on track.

The Key Parts of an RRA

An RRA is a series of education, communication, and information-gathering activities that helps a committee complete tasks in the first phase of the planning process quickly and thoroughly. An RRA begins to transform a committee from a collection of individuals with separate causes to a cohesive group committed to a common vision and plan.

A typical RRA program consists of:

- An information packet
- Targeted education
- A comprehensive watershed tour
- Meeting(s) with "stakeholders"
- Meeting(s) with public officials

A one-day format for conducting an RRA works quite well. Committee members are usually more than happy to set aside a day to better understand their watershed's unique resources and problems. If one day is insufficient, the logical way to split activities is to hold the targeted education and watershed tour on one day and the meetings on another day.

Some committees opt for a *series* of stakeholder and public official meetings, rather than a single meeting with stakeholders and another with public officials. This option needs to be considered in watersheds with large populations and numerous towns.

The following is a run-down on the key components of an RRA, as well as a summary of how each part was handled in the Blackberry Creek Watershed.

The information packet contains important background information, such as:

- The RRA agenda. The agenda for the RRA outlines activities for the day. It also lists program participants, as well as people and organizations donating services and money for the RRA.
- The watershed map. The watershed tour, including tour stops, should be clearly marked on the map. The map should also identify other points of interest, such as unique ecosystems or flooded subdivisions.
- Organizational information. The packet contains brochures, pamphlets, and other information about organizations that can help with watershed planning. These organizations include the Natural Resources Conservation Service (NRCS), conservation districts, the state environmental agency, and local planning units.
- Watershed information. The packet summarizes published and unpublished information and research on the watershed. It details the watershed's mix of natural, economic, and social resources, along with problems and opportunities in the watershed.
- Planning information. Committees may want to include general planning information and planning fact sheets put out by the NRCS or other agencies.

It's a good idea to distribute the packet several days before the start of an RRA. If that's not possible, it can be distributed on the day of the targeted education, watershed tour, or meetings.

CASE IN POINT: THE BLACKBERRY CREEK WATERSHED

The Blackberry Creek Watershed Committee developed a packet that included the following information:

- The day's agenda for the watershed tour
- A description of the Blackberry Creek Watershed
- A map of the Blackberry Creek Watershed with the tour route and stops, subdivisions, and other important points of interest marked
- Pamphlets on the NRCS, as well as on the Kendall County and Kane-DuPage soil and water conservation districts
- Fact sheets and pamphlets describing natural resource planning and the consequences
 of suburban sprawl in agricultural watersheds
- Newspaper clippings on the flooding and actions being taken by local government
- Articles on stream ecology and the creek's native fish populations

ercourages committee members to think more holistically about the watershed. Typically, one or more resource specialists educate the committee about the importance of the watershed's unique ecological resources and the impact of human activity on them.

The resource professionals brought in to educate the committee also go on the watershed tour to answer questions and tie abstract concepts to the land. A stream ecologist, for example, can point out good habitat for fish, discuss the merits of a stream-cleaning project, or suggest ways to improve the health of the stream.

CASE IN POINT: THE BLACKBERRY CREEK WATERSHED

Because so much of the focus had been on Blackberry Creek itself, the committee decided it was important to learn more about the stream's ecology and its role in the watershed. So the committee contacted Steve Pescitelli, a fisheries biologist with the Illinois Department of Natural Resources.

On the morning of the one-day RRA, Pescitelli gave a 1½-hour presentation. He described basic ecological processes, characteristics of healthy streams, the impacts of human activities on fish and other aquatic organisms, and actions that can be taken to restore degraded streams.

Although not apparent at the time, this discussion began to change the committee's view of Blackberry Creek. Instead of thinking of the creek as only a conveyance for stormwater runoff, they saw it as a valuable resource in the watershed and an integral part of innumerable human activities.

The Water Shed Tour

Atour helps committee members construct a mental image of the watershed and make connections between what they see on the land and what they see on paper.

The committee should tour the entire watershed, from one end to the other. During the tour, a knowledgeable spokesperson or guide continually updates committee members on their location and describes the watershed's important physical features, land uses, and problems.

At scheduled stops along the tour route, experts, officials, and committee members brief the group on a unique resource (such as a wetland) or a problem (such as a housing development in the floodplain).

CASE IN POINT: THE BLACKBERRY CREEK WATERSHED

The bus tour began at Blackberry
Creek's headwaters and ended where
the creek entered the Fox River. Along the
way, NRCS resource specialist Tom Ryterske
served as the primary spokesperson on the bus,
describing important natural features, economic
activities, flooded areas, and land use.

Like the board of a large corporation, the committee processed a lot of information in a relatively short period.

THE BLACKBERRY CREEK WATERSHED TOUR

The tour made three major stops, allowing committee members to share primary concerns about the watershed.

- **1. Nelson Lake.** At this stop, the planning committee looked at one of the most scenic points in the watershed and discussed ways to protect and preserve the lake.
- **2. Cherry Hill subdivision.** This subdivision was the residential area hardest hit by flooding. The average home in the subdivision suffered \$68,000 in damage.
- **3. Blackberry Oaks Golf Course.** At this stop, the committee toured the golf course, which was recently built in the floodplain. The committee learned how the floodplain could be preserved and still generate economic returns.

On the tour, the committee also studied land use patterns and other key flood points.



Citizen support and involvement is essential to locally led planning. A stakeholder meeting opens communication and creates opportunities for partnerships between stakeholders and the planning committee. For example, if overlooked concerns come up at the stakeholder meeting, the committee can address them by recruiting new members from the audience to serve on the committee or a subcommittee.

Stakeholders include anyone who benefits from or bears the damages of current watershed policies, as well as individuals who expect to be positively or negatively affected by the committee's actions. The most effective way to get the word out about the stakeholder meeting is the most obvious—announcements over the radio, on television, or in the area's newspapers. Representatives of key stakeholder groups should be personally contacted by telephone or letter.

Minority and low-income stakeholders often do not participate in these meetings, in part because they do not hear about the stakeholder meeting, their work schedules prevent them from attending, or they do not have transportation to make the meeting. Committees may need to contact these stakeholders directly and make the necessary travel arrangements to the meeting.

A stakeholder meeting follows a three-part format:

- Overview. A spokesperson briefly reviews the committee's charge, describes actions to date, and summarizes results of the watershed tour.
- Comment period. This is an open, but structured, dialogue run by a facilitator—an objective individual.
- Wrap-up. The spokesperson summarizes the main points of the meeting and any potential committee actions and recruits new committee members to represent missed stakeholder groups.

CASE IN POINT: THE BLACKBERRY CREEK WATERSHED

The planning committee hired a professional facilitator to run the stakeholder meeting, during which individuals expressed concerns and hopes. One by one, people brought up key issues, such as flooding, loss of farmland, and economic growth.

Almost imperceptibly, the public shifted discussion from issues to economically viable solutions that balance the many different needs.

This more holistic view generated a new set of issues, such as protecting the ecological integrity of Blackberry Creek and improving recreational fishing opportunities without impeding economic growth. Several individuals stressed that the solutions they come up with should not move flooding problems further downstream.

When the facilitator ended the meeting, committee members and stakeholders broke into smaller groups to continue their discussions.

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At this meeting (or series of meetings), committee members learn about the major government players in the watershed, their responsibilities, current and future programs that can improve the watershed, and ways that agencies can contribute to local planning. The meeting plan contains four parts:

- Overview. A spokesperson briefly reviews the committee's charge and summarizes what the committee has learned from the watershed tour and stakeholder meeting.
- Presentations. This is a structured period, in which government participants explain their responsibilities, current and future programs, and the possibility of forming partnerships with the committee.
- Question and answer period. During this period, government participants respond to questions from the planning committee. If the public is present, citizens also have a chance to ask questions about the planning effort.
- Wrap-up. The spokesperson summarizes the main conclusions from the meeting and any potential working relationships or commitments between the committee and government entities.

CASE IN POINT: THE BLACKBERRY CREEK WATERSHED

At the meeting with public officials, representatives from agencies and local government briefly explained their responsibilities and current and future programs that relate to the committee's planning goals. This information gave the planning committee an important overview of government activities. In addition, public officials learned more about each other's obvious and not-so-obvious overlapping responsibilities and programs.

Both the public officials and the planning committee recognized common goals—a key step in building a working relationship.

With the facilitator keeping the meeting on track, the committee and the public officials (joined by the audience) discussed ways they could work together to achieve separate and shared goals. Both groups agreed to join forces on some important short-term actions, such as starting a demonstration stream-cleaning project. They also agreed to collect and share data, participate in each other's planning efforts, and keep each other informed.

Conduct an RRA as soon as possible after forming a planning committee. A good time to suggest the RRA is near the end of the committee's first meeting. By this time, a number of problems or concerns will have already surfaced. The key steps follow:

- 1. A resource specialist from the committee's technical assistance team describes the purpose of an RRA and its components (targeted education, the watershed tour, meetings with stakeholders and public officials, and packet of support materials). The specialist seeks approval to form a subcommittee made up of three to six committee members.
- **2.** The specialist and subcommittee develop agendas for the watershed tour and public meetings. If time permits, subcommittee members should travel the tour route to make sure it satisfies their expectations.
- **3.** The subcommittee presents the entire agenda for the RRA to the planning committee. Based on feedback, the subcommittee makes any necessary changes, further develops the list of potential presenters and participants, and finalizes the agenda.

- **4.** The planning committee selects a date for the RRA.
- 5. The subcommittee and resource specialist finalize and confirm the list of presenters for the targeted education and tour, as well as a partial list of participants in the stakeholder and public official meetings.
- **6.** The subcommittee and specialist prepare the information packet, described on page 7.
- $\textbf{7.} \ \ \text{The subcommittee keeps the RRA on schedule.}$

The Roots of Rapid Resource Appraisal

The Rapid Resource Appraisal (RRA) is a modification of Rapid Appraisal, an approach used by researchers to quickly gather qualitative information when designing and implementing research activities. The following publications summarize Rapid Appraisal and its earlier predecessor, Rapid Rural Appraisal, including specific projects where each was used:

Gibbs, C.J.N. 1985. "Rapid Rural Appraisal: An Overview of Concepts and Application." Presented at the International Conference of Rapid Rural Appraisal, Khon Kaen, Thailand. September 2-5, 1985.

Conway, G.R., and McCracken, J.A. 1990. "Rapid Rural Appraisal and Agroecosystem Analysis." *Agroecology and Small Farm Development*. M.A. Altieri and S.B. Hecht, Editors. Boca Raton, Florida: CRC Press, pp. 221-235.

Beebe, J. 1995. "Basic Concepts and Techniques of Rapid Appraisal." *Human Organization*. Vol. 54:1, pp. 42-51.